

BLUE-GREEN ALGAL BLOOM WEEKLY UPDATE

REPORTING JUNE 26 - JULY 1, 2020

SUMMARY

There were 14 reported site visits in the past six days (6/26-7/1), with 16 samples collected. Algal bloom conditions were observed by the samplers at 11 sites.

Satellite imagery from 6/29 shows bloom potential in Lake Okeechobee on approximately 45% coverage concentrated in the center of the lake, while visible portions of the Caloosahatchee and St. Lucie rivers and estuaries show no observable bloom activity. Over the course of the week, the area of potential algal bloom has decreased in open waters and intensified along the northwestern and northeastern shorelines.

Satellite imagery from 6/29 for the **St. Johns River** is partially obscured by cloud cover, but shows little bloom potential in visible portions of **Lake George** or on the **mainstem of the St. Johns River downstream of Lake George**. The imagery indicates there may be an uptick on some of the **lakes associated with the St. Johns River System**. Please keep in mind that bloom potential is subject to change due to rapidly changing environmental conditions or satellite inconsistencies (i.e., wind, rain, temperature or stage).

On 6/29, South Florida Water Management District (SFWMD) staff sampled the C43 Canal – Upstream of S77, C43 – Upstream of S79 and Lake Okeechobee – S308C (Lakeside). The Lake Okeechobee – S308C sample and C43 Canal – Upstream of S79 were both dominated by *Microcystis aeruginosa*, while the C43 Canal – Upstream of S77 had no dominant algal taxon. No cyanotoxins were detected in these three samples.

On 6/29, the St. Johns River Water Management District (SJRWMD) staff collected a sample at Stick Marsh - Structure 98BNW. On 6/30 SJRWMD staff collected a sample from the Indian River (HAB20PB17). The Stick Marsh sample was dominated by Dolichospermum circinale. The Indian River sample was dominated by Pyrodinium sp. No cyanotoxins were detected in either sample, but saxitoxin results are still pending.

On 6/30, SFWMD staff collected follow up samples at microcystin hot spots (L004 and LZ40) identified during last week's Lake Okeechobee monitoring. The locations were sampled both near the surface and near the bottom of the water column. The L004 near surface sample was dominated by *Microcystis aeruginosa* and had 1.3 ppb total microcystin. The L004 near bottom sample was also dominated by *Microcystis aeruginosa* and had 1.3 ppb total microcystin. The LZ40 near surface sample was dominated by *Microcystis aeruginosa* and had 99.25 ppb total microcystin and the LZ40 near bottom sample had no dominant algal taxon and trace levels (0.28 ppb) of total microcystin.

On 6/30, Lee County staff sampled the Caloosahatchee River at Olga Road and at the Davis Boat Ramp. Both samples were dominated by Microcystis aeruginosa. The Olga Road sample had trace levels (0.58 ppb) of total microcystin, while cyanotoxins were not detected in the Davis Boat Ramp sample.

On 7/1, Florida Department of Environmental Protection (DEP) staff collected samples from Crescent Lake at the Eastside Boat Ramp and Near Haw Creek. DEP staff also collected a sample from the Dead Lake - Boat Ramp and Lake Mann - Boat Ramp. These results are still pending.

Last week's pending results are now available.

On 6/24, SFWMD staff collected samples on Lake Okeechobee at CLV10A, LZ40, PALMOUT3, PALMOUT3, PALMOUT1, PALMOUT1, PALMOUT1, LZ30, POLE3S, LZ25A, L007, L006 and PELBAY3. Algal bloom observations by samplers corresponded well to satellite imagery. Sample results were not available in time for last week's report. Samples from stations CLV10A, LZ40, PALMOUT3, PALMOUTI, LZ30 and L006 were dominated by Microcystis aeruginosa. PALMOUT2 was dominated by Microcystis aeruginosa and Dolichospermum circinale, while samples from PALMOUT, LZ25A, L007, and PELBAY3 had no dominant taxon. Cyanotoxins were not detected in the samples from stations CLV10A, PALMOUT, PALMOUT, POLES3S, LZ25A, L007 or PELBAY3. Trace levels of total microcystin were detected at PALMOUT2 (0.85 ppb) and LZ30 (0.33 ppb). Total microcystins were detected at LZ40 (290 ppb), PALMOUT3 (8.3 ppb), and L006 (4.3 ppb).

On 6/24 and 6/25, SJRWMD staff collected samples at St. Johns River at Welaka, Shands Bridge and Mandarin Point, Crescent Lake – Mouth of Dunns Creek, Crescent Lake at City Boat Ramp, Lake Monroe – Center, Lake Jessup – Off Grassy Point, Center of Doctors Lake, Stick Marsh North, and Lake Washington – Center; however, those results were still pending when last week's report was posted. The samples from St. Johns River - Welaka, Shands Bridge and Mandarin Point, Doctors Lake, and Lake Washington had no dominant algal taxon and no cyanotoxins detected. Both Crescent Lake samples were dominated by Aphanizomenon flosaquae, but only the City Boat Ramp sample had trace levels (0.33 ppb) of total microcystin detected. The Lake Monroe sample was dominated by Microcystis aeruginosa and had no cyanotoxins detected. The Lake Jessup sample was dominated by Cylindrospermopsis raciborskii and had no cyanotoxins detected. The Stick Marsh sample was dominated by Dolichospermum circinale and no cyanotoxins were detected.

This is a high-level summary of the sampling events for the reported week. For all field visit and analytical result details, please refer the complete algal bloom map with data table by clicking the "Field and Lab Details" Quick Link from the Algal Bloom Dashboard. Different types of blue-green algal bloom species can look different and have different impacts. However, regardless of species, many types of blue-green algae can produce toxins that can make you or your pets sick if swallowed or possibly cause skin and/or eye irritation due to contact. We advise to stay out of water where algae is visibly present as specks, mats or water is discolored pea-green, blue-green or brownish-red. Additionally, pets or livestock should not come into contact with the algal bloom-impacted water, or the algal bloom material or fish on the shoreline.

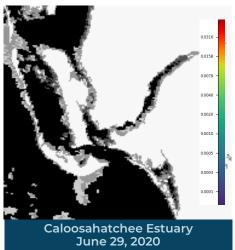
LAKE OKEECHOBEE OUTFLOWS

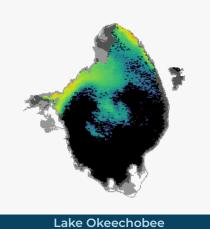
As of July 1, 2020 Current Lake Release Schedule West (S-79) 650 Pulse East (S-80) Atlantic Ocear *Updates are generally made on Fridays. Total Inflows and Outflows (cfs) Weekly Inflow 15,968 West 3,013 South 3,688 Weekly Outflow East -649 LAKE OKEECHOBEE

SITE VISITS FOR BLUE-GREEN ALGAE

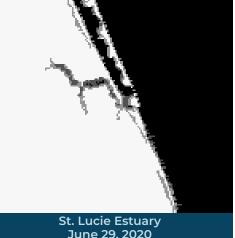


Satellite Imagery provided by NOAA - Images are impacted by cloud-cover



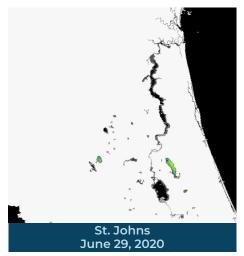


June 29, 2020



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SALTWATER BLOOM



REPORTS FROM HOTLINE



REPORT PUBLIC HEALTH ISSUES **HUMAN ILLNESS**

Florida Poison Control Centers can be reached 24/7 at 800-222-1222 (DOH provides grant funding to the Florida Poison Control Centers)

OTHER PUBLIC HEALTH CONCERNS

CONTACT DOH

(DOH county office) FloridaHealth.gov/



- Observe stranded wildlife or a fish kill
- Information about red tide and other saltwater algal blooms

CONTACT FWC

800-636-0511 (fish kills) 888-404-3922 (wildlife Alert)

MyFWC.com/RedTide

FRESHWATER BLOOM

- Observe an algal bloom in a lake or freshwater river
- Information about bluegreen algal blooms



REPORT ALGAL BLOOMS

855-305-3903 (to report freshwater blooms)

FloridaDEP.gov/AlgalBloom